[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2014-0490; Directorate Identifier 2014-NM-133-AD; Amendment

39-17926; AD 2014-16-02]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc. Airplanes

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Bombardier, Inc. Model CL-600-1A11 (CL-600) airplanes. This AD requires revising the airplane flight manual to prohibit thrust reverser operation, and repetitive detailed inspections of both engine thrust reversers for cracks and modification if necessary. The modification of the thrust reversers is also an optional terminating action for the repetitive inspections. This AD was prompted by reports of partial deployment of an engine thrust reverser in-flight caused by a failure of the translating sleeve at the thrust reverser attachment points. We are issuing this AD to detect and correct cracks of the translating sleeve at the thrust reverser actuator attachment points, which could result in deployment or dislodgement of an engine thrust reverser in-flight and subsequent reduced control of the airplane.

**DATES:** This AD becomes effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations,
   M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE.,
   Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet

http://www.bombardier.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2014-0490; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Fabio Buttitta, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7303; fax 516-794-5531.

#### **SUPPLEMENTARY INFORMATION:**

### **Discussion**

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Emergency Airworthiness Directive CF-2014-19, dated June 20, 2014 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for certain Bombardier, Inc. Model CL-600-1A11 (CL-600) airplanes. The MCAI states:

There have been two reported incidents of partial deployment of an engine thrust reverser in-flight, caused by a failure of the translating sleeve at the thrust reverser actuator attachment points. Inspection of the same area on some other thrust reversers revealed cracks emanating from the holes under the nut plates.

In both incidents, the affected aeroplane landed safely without any noticeable controllability issues, however structural failure of thrust reverser actuator attachment points resulting in thrust reverser deployment or dislodgment in flight [and subsequent reduced control of the airplane] is a safety hazard warranting an immediate mitigating action.

To help in mitigating any immediate safety hazard, Bombardier Inc. has revised the Aircraft Flight Manual (AFM) through Temporary Revisions (TR) 600/29, 600/30, 600-1/24 and 600-1/26, to prohibit the thrust reverser operation on affected aeroplanes. Additionally, as an interim corrective action, Bombardier Inc. has issued alert service bulletin (ASB) A600-0769 requiring an inspection and/or a mechanical lock out of the thrust reverser to prevent it from moving out of forward thrust mode.

This [Canadian] AD is issued to mandate the incorporation of revised AFM procedures per TR 600/29, 600/30, 600-1/24 and 600-1/26 and compliance with ASB A600-0769 for all affected CL-600-1A11 aeroplanes.

Required actions also include repetitive detailed inspections (including a borescope inspection) of both engine thrust reversers for cracks, and modifying the thrust reversers if necessary. Modifying the thrust reversers terminates the detailed inspections. You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2014-0490.

### **Relevant Service Information**

Bombardier, Inc. has issued the following service information. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

- Bombardier Alert Service Bulletin A600-0769, Revision 01, dated
   June 26, 2014.
- Canadair Temporary Revision (TR) 600/29, dated June 20, 2014, to the Canadair CL-600-1A11 Airplane Flight Manual (AFM).
- Canadair TR 600/30, dated June 6, 2014, to the Canadair CL-600-1A11
   AFM.
- Canadair TR 600-1/24, dated June 20, 2014, to the Canadair CL-600-1A11 AFM (Winglets) including Erratum, Publication No. PSP 600-1AFM (US), TR No. 600-1/24, June 20, 2014.
- Canadair TR 600-1/26, dated June 6, 2014, to the Canadair CL-600-1A11 AFM (Winglets).

## FAA's Determination and Requirements of this AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

## "Contacting the Manufacturer" Paragraph in this AD

Since late 2006, we have included a standard paragraph titled "Airworthy Product" in all MCAI ADs in which the FAA develops an AD based on a foreign authority's AD.

The MCAI or referenced service information in an FAA AD often directs the owner/operator to contact the manufacturer for corrective actions, such as a repair.

Briefly, the Airworthy Product paragraph allowed owners/operators to use corrective actions provided by the manufacturer if those actions were FAA-approved. In addition, the paragraph stated that any actions approved by the State of Design Authority (or its delegated agent) are considered to be FAA-approved.

In an NPRM having Directorate Identifier 2012-NM-101-AD (78 FR 78285, December 26, 2013), we proposed to prevent the use of repairs that were not specifically developed to correct the unsafe condition, by requiring that the repair approval provided by the State of Design Authority or its delegated agent specifically refer to the FAA AD. This change was intended to clarify the method of compliance and to provide operators with better visibility of repairs that are specifically developed and approved to correct the unsafe condition. In addition, we proposed to change the phrase "its delegated agent" to include a design approval holder (DAH) with State of Design Authority design organization approval (DOA), as applicable, to refer to a DAH authorized to approve required repairs for the proposed AD.

One commenter to the NPRM having Directorate Identifier 2012-NM-101-AD (78 FR 78285, December 26, 2013) stated the following: "The proposed wording, being

specific to repairs, eliminates the interpretation that Airbus messages are acceptable for approving minor deviations (corrective actions) needed during accomplishment of an AD mandated Airbus service bulletin."

This comment has made the FAA aware that some operators have misunderstood or misinterpreted the Airworthy Product paragraph to allow the owner/operator to use messages provided by the manufacturer as approval of deviations during the accomplishment of an AD-mandated action. The Airworthy Product paragraph does not approve messages or other information provided by the manufacturer for deviations to the requirements of the AD-mandated actions. The Airworthy Product paragraph only addresses the requirement to contact the manufacturer for corrective actions for the identified unsafe condition and does not cover deviations from other AD requirements. However, deviations to AD-required actions are addressed in 14 CFR 39.17, and anyone may request the approval for an alternative method of compliance to the AD-required actions using the procedures found in 14 CFR 39.19.

To address this misunderstanding and misinterpretation of the Airworthy Product paragraph, we have changed the paragraph and retitled it "Contacting the Manufacturer." This paragraph now clarifies that for any requirement in this AD to obtain corrective actions from a manufacturer, the actions must be accomplished using a method approved by the FAA, Transport Canada Civil Aviation (TCCA), or Bombardier's TCCA Design Approval Organization (DAO).

The Contacting the Manufacturer paragraph also clarifies that, if approved by the DAO, the approval must include the DAO-authorized signature. The DAO signature

indicates that the data and information contained in the document are TCCA-approved, which is also FAA-approved. Messages and other information provided by the manufacturer that do not contain the DAO-authorized signature approval are not TCCA-approved, unless TCCA directly approves the manufacturer's message or other information.

This clarification does not remove flexibility previously afforded by the Airworthy Product paragraph. Consistent with long-standing FAA policy, such flexibility was never intended for required actions. This is also consistent with the recommendation of the Airworthiness Directive Implementation Aviation Rulemaking Committee to increase flexibility in complying with ADs by identifying those actions in manufacturers' service instructions that are "Required for Compliance" with ADs. We continue to work with manufacturers to implement this recommendation. But once we determine that an action is required, any deviation from the requirement must be approved as an alternative method of compliance.

#### Difference Between this AD and the MCAI or Service Information

Part 3 of Canadian Emergency AD CF-2014-19, dated June 20, 2014, which specifies accomplishing a repair or modification of the thrust reversers, is not required in this AD. We are currently considering requiring a repair or modification of the thrust reversers. However, the planned compliance time for the action would allow enough time to provide notice and opportunity for prior public comment on the merits of the actions.

## **FAA's Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because cracks of the translating sleeve at the thrust reverser actuator attachment points could result in thrust reverser deployment or dislodgement in-flight and subsequent reduced control of the airplane. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

#### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2014-0490; Directorate Identifier 2014-NM-133-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

# **Costs of Compliance**

We estimate that this AD affects 18 airplanes of U.S. registry.

We also estimate that it will take about 29 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$44,370, or \$2,465 per product.

In addition, we estimate that any necessary follow-on actions will take about 72 work-hours and require parts costing \$509, for a cost of \$6,629 per product. We have no way of determining the number of aircraft that might need this action.

# **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

**Regulatory Findings** 

We determined that this AD will not have federalism implications under

Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national government and the States, or on the distribution of

power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures

(44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a

substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**Adoption of the Amendment** 

Accordingly, under the authority delegated to me by the Administrator, the FAA

amends 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES** 

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

11

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2014-16-02 Bombardier, Inc.:** Amendment 39-17926. Docket No. FAA-2014-0490; Directorate Identifier 2014-NM-133-AD.

## (a) Effective Date

This AD becomes effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

### (b) Affected ADs

None.

# (c) Applicability

This AD applies to Bombardier, Inc. Model CL-600-1A11 (CL-600) airplanes, certificated in any category, serial numbers 1004 through 1085.

## (d) Subject

Air Transport Association (ATA) of America Code 78, Engine Exhaust.

#### (e) Reason

This AD was prompted by reports of partial deployment of an engine thrust reverser in-flight caused by a failure of the translating sleeve at the thrust reverser attachment points. We are issuing this AD to detect and correct cracks of the translating sleeve at the thrust reverser actuator attachment points, which could result in deployment or dislodgement of an engine thrust reverser in-flight and subsequent reduced control of the airplane.

## (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

## (g) Airplane Flight Manual (AFM) Revision

Within 1 calendar day after the effective date of this AD: Revise the applicable sections of the AFM to include the information specified in the temporary revisions (TRs) identified in paragraphs (g)(1), (g)(2), (g)(3), and (g)(4) of this AD, as applicable. These TRs introduce procedures to prohibit thrust reverser operation. Operate the airplane according to the limitations and procedures in the TRs identified in paragraphs (g)(1), (g)(2), (g)(3), and (g)(4) of this AD, as applicable. The revision required by paragraph (g) of this AD may be done by inserting copies of the applicable TRs identified in paragraphs (g)(1), (g)(2), (g)(3), and (g)(4) of this AD into the AFM. When these TRs have been included in general revisions of the AFM, the general revisions may be inserted in the AFM, provided the relevant information in the general revision is identical to that in the applicable TRs, and the TRs may be removed.

- (1) Canadair TR 600/29, dated June 20, 2014, to the Canadair CL-600-1A11 AFM.
  - (2) Canadair TR 600/30, dated June 6, 2014, to the Canadair CL-600-1A11 AFM.
- (3) Canadair TR 600-1/24, dated June 20, 2014, to the Canadair CL-600-1A11 AFM (Winglets) including Erratum, Publication No. PSP 600-1AFM (US), TR No. 600-1/24, June 20, 2014.
- (4) Canadair TR 600-1/26, dated June 6, 2014, to the Canadair CL-600-1A11 AFM (Winglets).

# (h) Repetitive Inspections

Within 25 flight cycles or 90 days, whichever occurs first, after the effective date of this AD, do detailed inspections (including a borescope inspection) of both engine thrust reversers for cracks, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin A600-0769, Revision 01, dated June 26, 2014.

- (1) If no cracking is found during any inspection required by paragraph (h) of this AD, repeat the inspection required by paragraph (h) of this AD thereafter at intervals not to exceed 100 flight cycles until the modification specified in paragraph (i) of this AD is done.
- (2) If any cracking is found during any inspection required by paragraph (h) of this AD, before further flight, modify the thrust reversers on both engines, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin A600-0769, Revision 01, dated June 26, 2014.

## (i) Optional Terminating Modification

Modifying the thrust reversers on both engines, in accordance with the Accomplishment Instructions of Bombardier Alert Service Bulletin A600-0769, Revision 01, dated June 26, 2014, terminates the inspections required by paragraph (h) of this AD.

## (j) Credit for Previous Actions

This paragraph provides credit for actions required by paragraphs (h) and (i) of this AD, if those actions were performed before the effective date of this AD using Bombardier Alert Service Bulletin A600-0769, dated June 19, 2014, which is not incorporated by reference in this AD.

## (k) Other FAA AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO, ANE-170, Engine and Propeller Directorate, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design

Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

## (I) Related Information

- (1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Emergency Airworthiness Directive CF-2014-19, dated June 20, 2014, for related information. You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2014- 0490.
- (2) Service information identified in this AD that is not incorporated by reference may be obtained at the addresses specified in paragraphs (m)(3) and (m)(4) of this AD.

# (m) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.
- (i) Bombardier Alert Service Bulletin A600-0769, Revision 01, dated June 26, 2014.
- (ii) Canadair Temporary Revision 600/29, dated June 20, 2014, to the Canadair CL-600-1A11 Airplane Flight Manual.
- (iii) Canadair Temporary Revision 600/30, dated June 6, 2014, to the Canadair CL-600-1A11 Airplane Flight Manual.
  - (iv) Canadair Temporary Revision 600-1/24, dated June 20, 2014, to the Canadair

CL-600-1A11 Airplane Flight Manual (Winglets) including Erratum, Publication No. PSP 600-1AFM (US), TR No. 600-1/24, June 20, 2014.

- (v) Canadair Temporary Revision 600-1/26, dated June 6, 2014, to the Canadair CL-600-1A11 Airplane Flight Manual (Winglets).
- (3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet http://www.bombardier.com.
- (4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.
- (5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on August 4, 2014.

Jeffrey E. Duven, Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2014-18866 Filed 08/11/2014 at 8:45 am; Publication Date: 08/12/2014]